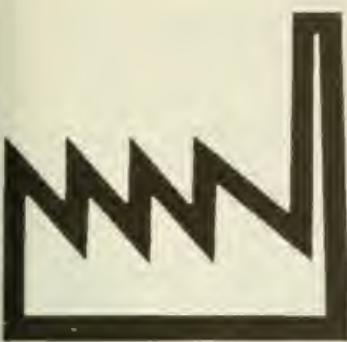


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## PRELIMINARY REPORT INDUSTRY SERIES

# 1987

# Census of Manufactures

MC87-I-39B(P)  
Issued July 1989

## MUSICAL INSTRUMENTS AND PARTS; TOYS AND SPORTING GOODS

Industries 3931, 3942, 3944, and 3949

### INTRODUCTION

This report presents preliminary statistics from the 1987 Census of Manufactures for those establishments classified in the industries listed above. These data will be superseded by a more comprehensive final paperbound report. The method of data collection and use of administrative data are discussed in detail in the appendix.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The definitions of these industries are the same as those used in the 1987 Standard Industrial Classification (SIC) Manual.<sup>1</sup>

### INDUSTRY 3931, MUSICAL INSTRUMENTS

In the 1987 Census of Manufactures, Industry 3931, Musical Instruments, had employment of 12.4 thousand. The employment figure was 30 percent below the 17.8 thousand reported in 1982.

The total value of shipments for establishments classified in this industry was \$836.8 million.

The cost of materials and services used by establishments in this industry amounted to \$329.8 million in 1987. Data on specific materials consumed appear in table 3.

<sup>1</sup>Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Address inquiries to Bureau of the Census, Industry Division, Washington, DC 20233, or call Ric Williamson (301) 763-7304.



U.S. Department of Commerce  
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1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was \$5.1 billion.

The cost of materials and services used by establishments in this industry amounted to \$2.3 billion in 1987. Data on specific materials consumed appear in table 3.

## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in the tables in this publication:

-	Represents zero.
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(NC)	Not comparable.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review.
(X)	Not applicable.
(Z)	Less than half the unit shown.
do	Ditto.

n.e.c.	Not elsewhere classified.
n.s.k.	Not specified by kind.
pt.	Part.
r	Revised.
SIC	Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, doz, bbl, and s tons, are used in the customary sense.

## CONTACTS FOR DATA USERS

Subject Area	Contact	Phone
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**Table 1. Historical Statistics for the Industry: 1987 and Earlier Years**

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix]

Year <sup>1</sup>	Com- pa- nies <sup>2</sup> (no.)	All establish- ments <sup>3</sup>		All employees		Production workers			Value added by manufac- ture <sup>4</sup> (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expendi- tures (million dollars)	End-of- year inven- tories <sup>4</sup> (million dollars)	Ratios	
		Total (no.)	With 20 employ- ees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						Specia- liza- tion (per- cent)	Cover- age (per- cent)
<b>INDUSTRY 3931, MUSICAL INSTRUMENTS</b>															
1987 Census ----	(NA)	422	105	12.4	223.0	9.9	19.0	149.4	517.5	329.8	836.8	14.6	197.5	(NA)	(NA)
1986 ASM -----	(NA)	(NA)	12.2	211.8	9.4	18.8	140.2	443.5	301.3	742.2	11.0	180.7	(NA)	(NA)	
1985 ASM -----	(NA)	(NA)	12.1	202.8	9.1	17.4	134.8	407.2	295.7	725.2	15.0	203.5	(NA)	(NA)	
1984 ASM -----	(NA)	(NA)	14.0	228.6	10.8	20.8	153.9	421.8	384.5	811.4	19.3	257.1	(NA)	(NA)	
1983 ASM -----	(NA)	(NA)	16.6	261.3	13.1	24.7	175.6	489.4	441.4	945.6	15.5	271.6	(NA)	(NA)	
1982 Census ----	403	452	137	17.8	257.8	14.0	25.7	176.6	494.8	415.5	915.9	20.1	270.7	98	97
1981 ASM -----	(NA)	(NA)	23.9	335.2	18.8	35.6	235.3	619.5	531.2	1 138.4	20.2	295.9	(NA)	(NA)	
1980 ASM -----	(NA)	(NA)	24.3	306.3	19.1	35.7	212.8	583.1	522.7	1 119.8	36.0	275.5	(NA)	(NA)	
1979 ASM -----	(NA)	(NA)	27.6	322.1	22.1	42.3	229.3	538.8	539.0	1 072.8	22.8	290.4	(NA)	(NA)	
1978 ASM -----	(NA)	(NA)	27.2	302.8	21.9	41.7	211.5	553.7	512.0	1 052.6	27.8	294.3	(NA)	(NA)	
1977 Census ----	400	450	127	25.2	259.7	20.6	38.2	178.2	488.2	428.9	924.9	13.8	243.2	98	99
1976 ASM -----	(NA)	(NA)	26.4	242.2	21.4	41.0	169.1	537.7	411.6	925.2	15.6	247.2	(NA)	(NA)	
1975 ASM -----	(NA)	(NA)	25.3	219.4	20.3	38.1	151.8	392.0	362.1	773.7	15.8	200.3	(NA)	(NA)	
1974 ASM -----	(NA)	(NA)	29.6	234.3	23.9	45.7	172.8	441.1	385.7	806.0	13.7	227.9	(NA)	(NA)	
1973 ASM -----	(NA)	(NA)	25.8	195.7	20.6	40.3	147.4	379.0	350.9	714.9	10.9	178.3	(NA)	(NA)	
1972 Census ----	310	344	111	24.5	173.4	19.7	38.3	123.9	339.3	296.6	617.5	10.6	151.6	97	99
<b>INDUSTRY 3942, DOLLS AND STUFFED TOYS</b>															
1987 Census ----	(NA)	189	51	4.2	56.1	3.2	5.5	29.9	145.2	150.4	285.2	4.2	56.6	(NA)	(NA)
1986 ASM -----	(NA)	(NA)	3.0	48.4	1.8	3.3	23.1	235.0	235.6	470.6	(D)	71.5	(NA)	(NA)	
1985 ASM -----	(NA)	(NA)	3.5	52.4	2.4	4.4	29.3	231.3	257.6	496.0	16.2	95.3	(NA)	(NA)	
1984 ASM -----	(NA)	(NA)	6.4	89.7	5.1	9.4	58.1	312.6	317.8	614.9	(D)	101.9	(NA)	(NA)	
1983 ASM -----	(NA)	(NA)	7.7	103.1	5.5	10.1	47.9	335.7	256.9	595.1	(D)	78.0	(NA)	(NA)	
1982 Census ----	233	237	71	7.3	86.6	5.9	10.6	48.1	209.5	194.2	402.7	7.3	71.2	90	66
1981 ASM -----	(NA)	(NA)	7.9	81.7	6.5	10.6	44.8	209.0	207.1	410.9	6.3	69.2	(NA)	(NA)	
1980 ASM -----	(NA)	(NA)	8.2	71.5	6.7	11.1	45.4	168.4	179.9	349.1	4.0	61.3	(NA)	(NA)	
1979 ASM -----	(NA)	(NA)	8.6	70.0	7.2	12.2	42.3	167.3	170.0	338.9	4.4	63.4	(NA)	(NA)	
1978 ASM -----	(NA)	(NA)	9.3	68.7	7.9	13.7	41.5	168.5	158.4	322.7	7.3	68.2	(NA)	(NA)	
1977 Census ----	223	231	88	9.1	65.3	8.0	13.3	43.5	181.6	171.6	340.2	6.4	62.5	94	59
1976 ASM -----	(NA)	(NA)	9.5	59.0	8.3	13.0	39.6	131.4	114.1	243.4	9.9	40.6	(NA)	(NA)	
1975 ASM -----	(NA)	(NA)	8.9	54.5	7.9	13.3	38.8	110.3	100.3	214.8	3.3	34.4	(NA)	(NA)	
1974 ASM -----	(NA)	(NA)	10.7	61.0	9.4	16.2	44.5	135.1	123.8	253.3	4.5	49.5	(NA)	(NA)	
1973 ASM -----	(NA)	(NA)	9.2	51.1	8.2	14.6	36.5	91.5	108.8	195.6	1.8	34.8	(NA)	(NA)	
1972 Census ----	237	243	105	10.2	54.0	9.0	16.2	38.6	98.3	101.5	199.1	1.7	30.9	99	68
<b>INDUSTRY 3944, GAMES, TOYS, AND CHILDREN'S VEHICLES</b>															
1987 Census ----	(NA)	707	199	30.9	543.1	23.8	45.2	331.7	1 935.2	1 534.6	3 429.3	94.2	493.6	(NA)	(NA)
1986 ASM -----	(NA)	(NA)	30.0	504.3	22.3	41.7	305.8	1 663.1	1 603.8	3 264.7	112.4	497.2	(NA)	(NA)	
1985 ASM -----	(NA)	(NA)	27.6	462.5	20.6	38.5	267.3	1 714.8	1 601.2	3 323.7	68.2	538.3	(NA)	(NA)	
1984 ASM -----	(NA)	(NA)	33.5	530.9	26.1	48.7	327.1	2 120.6	1 965.9	4 020.2	66.6	503.7	(NA)	(NA)	
1983 ASM -----	(NA)	(NA)	43.9	565.6	34.4	61.3	345.2	1 980.0	1 547.8	3 552.8	99.8	545.9	(NA)	(NA)	
1982 Census ----	732	780	253	43.8	625.0	32.2	59.4	363.6	2 622.6	1 854.5	4 476.0	111.5	652.5	89	91
1981 ASM -----	(NA)	(NA)	48.4	667.2	35.3	67.1	363.8	2 549.6	2 034.2	4 556.7	107.3	657.3	(NA)	(NA)	
1980 ASM -----	(NA)	(NA)	50.6	638.9	37.2	69.9	359.7	2 039.3	1 737.9	3 729.8	131.5	632.3	(NA)	(NA)	
1979 ASM -----	(NA)	(NA)	53.9	606.5	40.8	77.4	362.4	1 826.5	1 620.8	3 436.1	89.0	585.8	(NA)	(NA)	
1978 ASM -----	(NA)	(NA)	51.0	551.2	37.3	71.0	313.1	1 570.3	1 386.5	2 918.5	83.1	505.3	(NA)	(NA)	
1977 Census ----	754	800	251	53.1	520.6	39.2	73.2	295.0	1 544.6	1 205.6	2 719.7	78.5	437.7	86	93
1976 ASM -----	(NA)	(NA)	49.8	448.2	38.3	71.1	269.6	1 271.6	949.3	2 199.4	82.7	336.7	(NA)	(NA)	
1975 ASM -----	(NA)	(NA)	49.2	414.9	37.7	69.3	241.2	1 043.7	857.3	1 948.8	58.5	327.9	(NA)	(NA)	
1974 ASM -----	(NA)	(NA)	60.0	452.9	47.0	90.7	274.5	1 087.7	932.1	1 984.3	69.8	430.2	(NA)	(NA)	
1973 ASM -----	(NA)	(NA)	63.8	442.1	51.1	94.0	280.3	1 000.3	901.0	1 935.3	77.4	356.6	(NA)	(NA)	
1972 Census ----	619	664	284	61.5	421.0	48.3	91.9	269.1	980.6	761.7	1 734.3	72.7	295.1	86	92
<b>INDUSTRY 3949, SPORTING AND ATHLETIC GOODS, N.E.C.</b>															
1987 Census ----	(NA)	1 765	485	52.7	900.5	39.2	74.0	549.1	2 772.1	2 308.2	5 057.8	132.1	993.5	(NA)	(NA)
1986 ASM -----	(NA)	(NA)	43.2	729.1	31.8	61.5	449.5	2 131.2	1 844.9	3 980.6	(D)	829.3	(NA)	(NA)	
1985 ASM -----	(NA)	(NA)	42.8	707.6	32.4	60.1	437.9	1 928.6	1 782.4	3 766.1	111.3	827.4	(NA)	(NA)	
1984 ASM -----	(NA)	(NA)	46.7	742.6	35.2	68.3	459.7	2 020.7	1 812.6	3 765.3	(D)	897.4	(NA)	(NA)	
1983 ASM -----	(NA)	(NA)	44.8	663.1	33.7	63.1	411.0	1 759.3	1 572.4	3 333.9	(D)	761.7	(NA)	(NA)	
1982 Census ----	1 453	1 553	460	47.8	677.7	36.0	67.7	426.1	1 778.0	1 591.2	3 376.8	76.5	796.2	97	95
1981 ASM -----	(NA)	(NA)	52.4	660.0	40.4	77.0	423.0	1 681.2	1 577.8	3 249.0	68.1	736.2	(NA)	(NA)	
1980 ASM -----	(NA)	(NA)	53.9	634.6	42.2	80.7	413.8	1 610.1	1 496.2	3 055.3	73.5	685.2	(NA)	(NA)	
1979 ASM -----	(NA)	(NA)	56.0	600.1	44.3	84.4	401.5	1 457.8	1 362.0	2 812.2	88.8	621.7	(NA)	(NA)	
1978 ASM -----	(NA)	(NA)	59.7	588.4	48.1	88.5	398.8	1 339.9	1 279.2	2 575.9	69.3	631.4	(NA)	(NA)	
1977 Census ----	1 757	1 878	496	57.2	525.8	46.1	85.9	358.6	1 273.6	1 182.0	2 425.1	62.7	579.1	95	94
1976 ASM -----	(NA)	(NA)	60.0	525.6	48.8	88.0	360.9	1 257.0	1 075.4	2 303.4	89.0	555.4	(NA)	(NA)	
1975 ASM -----	(NA)	(NA)	54.5	447.8	43.8	78.7	300.7	1 006.6	924.0	1 993.4	44.4	512.2	(NA)	(NA)	
1974 ASM -----	(NA)	(NA)	61.9	455.7	50.5	92.5	321.5	1 063.1	906.2	1 891.8	59.4	725.4	(NA)	(NA)	
1973 ASM -----	(NA)	(NA)	57.6	389.9	46.7	87.2	272.3	894.9	750.8	1 613.4	45.1	422.7	(NA)	(NA)	
1972 Census ----	1 441	1 553	463	61.0	405.9	49.1	93.5	291.7	843.6	1 729.2	46.7	377.9	89	94	

Note: Establishments of single unit companies with up to 20 employees (cutoff varied by industry) were excluded from the mail portion of the census. Data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were estimated based on administrative-record information from other agencies in conjunction with industry averages. These establishments accounted for the following percent of total value of shipments: SIC 3931, 10%; SIC 3942, 20%; SIC 3944, 8%; and SIC 3949, 12%.

<sup>1</sup>In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1972, see 1972 Census of Manufactures, vol. II, table 1a of the Industry chapter.

<sup>2</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during year.

<sup>4</sup>Beginning with the 1982 Census of Manufactures, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior Censuses and annual surveys of manufactures in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, inventories and value added by manufacture are not comparable to prior-year data.

**Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>	
			Quantity <sup>2</sup>	Value (million dollars)		Quantity <sup>2</sup>	Value (million dollars)
<b>3931--</b>	<b>MUSICAL INSTRUMENTS</b>						
	Total	(NA)	(X)	783.8	(NA)	(X)	876.5
39311	Pianos	(NA)	(X)	171.8	(NA)	(X)	194.8
39311 11	Verticals, uprights, or consoles, 37 in. or less in height	40.9	38.5	6	32.6	21.1	
39311 15	Verticals, uprights, or consoles, more than 37 in. in height	52.1	75.1	14	141.4	141.5	
39311 51	Grand pianos	7.7	58.2	8	7.1	32.2	
39311 00	Pianos, n.s.k.	(NA)	(X)	(NA)	(X)	-	
39312	Organs	(NA)	(X)	82.7	(NA)	(X)	177.7
39312 11	Pipe and reed	(NA)	(S)	22.1	17	(S)	24.6
39312 51	Electronic	(NA)	(S)	60.6	9	128.2	153.2
39312 00	Organs, n.s.k.	(NA)	(X)	-	(NA)	(X)	-
39313	Piano and organ parts	(NA)	(X)	40.6	(NA)	(X)	94.1
39313 11	Piano parts and materials (actions, attachments, strings, tuning pins, etc.), except benches	(NA)	(X)	33.4	17	(X)	67.2
39313 51	Organ parts and materials, except benches	(NA)	(X)	7.2	15	(X)	26.8
39313 00	Piano and organ parts, n.s.k.	(NA)	(X)	-	(NA)	(X)	-
39314	Other musical instruments and parts	(NA)	(X)	384.1	(NA)	(X)	346.4
	Wind instruments, except organs and accordions:						
39314 13	Woodwinds	(NA)	265.6	54.2	13	344.1	59.1
39314 15	Brass winds	(NA)	240.8	77.1	8	169.7	60.1
	Fretted instruments, nonelectronic only:						
39314 24	Guitars	(NA)	(S)	23.6			
39314 25	Other, including banjos, mandolins, ukuleles	(NA)	(S)	1.2	13	140.9	41.6
39314 26	String instruments (such as violins, violas, bass, cellos, harps, harpsichords, and clavichords)	(NA)	(X)	85.8	8	*8.1	5.8
39314 31	Accessories and parts, sold separately, such as reed mouthpieces, strings (excluding piano strings), music stands, drummers' traps, etc., except instrument cases and benches	(NA)	(X)	35	(X)	67.8	
39314 50	Electronic musical instruments, other than electronic organs and synthesizers	(NA)	(S)	28.3	13	*59.4	23.8
39314 52	Synthesizers (all types)	(NA)	(X)	38.5	5	(X)	22.5
39314 88	Percussion musical instruments (cymbals, drums, vibraphones (nonelectronic), etc.)	(NA)	(S)	69.4	10	1 073.5	48.6
39314 98	Other nonelectronic musical instruments, including accordions, etc.	(NA)	(X)	6.0	11	(S)	17.0
39314 00	Other musical instruments and parts, n.s.k.	(NA)	(X)	38.6	(NA)	(X)	46.7
39310	Musical instruments, n.s.k.	(NA)	(X)	104.5	(NA)	(X)	63.6
39310 00	Musical instruments and parts, n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	65.9	(NA)	(X)	16.9
39310 02	Musical instruments and parts, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	38.6	(NA)	(X)	
<b>3942--</b>	<b>DOLLS</b>						
	Total	(NA)	(X)	296.5	(NA)	(X)	523.6
39420	Dolls and toy animals, including accessories thereof:						
39420 08	Stuffed dolls	(NA)	(X)	20.8	18	(X)	68.1
39420 09	Dolls, complete, more than 13 in. (excluding stuffed dolls):	(NA)	-	-	4	*4	6.8
39420 11	Mechanical/electrical	(NA)	(S)	13.6	13	*5.0	57.5
	Other	(NA)	(D)	11	2		
39420 22	Dolls, complete, 13 in. or less (except stuffed dolls):	(NA)	(S)	17.1	1	36.6	79.0
39420 23	Fashion dolls, excluding space fashion dolls	(NA)	(D)	4	11	2.8	32.2
39420 24	Action figures, excluding space action figures	(NA)	(X)	4.4	7	(X)	14.8
39420 25	Space fashion dolls and space action figures, excluding airplane pilots and astronauts	(NA)	(X)	-	3		
39420 26	Other, including collectors' miniatures	(NA)	(D)	4	(X)	7.9	
39420 37	Doll parts	(NA)	(X)	1	(X)		
39420 39	Fashion doll clothes, accessories, and playsets, excluding those for space fashion dolls	(NA)	(X)	1	(X)		
39420 40	Action figure clothes, accessories, and playsets, excluding those for space fashion dolls	(NA)	(X)	1	(X)		
39420 42	Space fashion doll clothes and space action figure clothes, accessories, and playsets, excluding airplane pilots and astronauts	(NA)	(X)	1	(X)		
39420 53	Other doll clothes and accessories	(NA)	(X)	8	1		
39420 54	Stuffed toy animals	(NA)	(X)	41	8	*32.3	151.6
39420 54	millions	(NA)	(S)	168.5	11	(X)	30.8
39420 56	Other stuffed toys	(NA)	(X)	5	(X)		
	Other animals and figures, not stuffed, including puppets and marionettes	(NA)	(D)	4	1		
39420 00	Dolls and toy animals, n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	5	(X)	4.8	
39420 02	Dolls and toy animals, n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	38.4	(NA)	(X)	20.1
	Total	(NA)	(X)	18.2	(NA)	(X)	8.9
<b>3944--</b>	<b>GAMES, TOYS, AND CHILDREN'S VEHICLES</b>						
	Total	(NA)	(X)	3 044.2	(NA)	(X)	3 976.9
39443	Baby carriages and children's vehicles, except bicycles with pneumatic tires	(NA)	(X)	240.8	(NA)	(X)	315.1
39443 11	Baby carriages, including combination carriage-strollers	(NA)	(S)	(?)	7	(S)	20.4
39443 15	Strollers	(NA)	(S)	7.6	7	(S)	33.0
39443 33	Children's automobiles and tractors (pedal driven)	(NA)	(S)	5.7	4	(D)	(4)
39443 46	Tricycles (including pedal and chain driven), plastics and metal tubular construction	(NA)	(S)	66.6	(NA)	3 836.7	53.3

See footnotes at end of table.

**Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text.]

1987 product code	Product	1987			1982		
		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>	
			Quantity <sup>2</sup>	Value (million dollars)		Quantity <sup>2</sup>	Value (million dollars)
3944- --	<b>GAMES, TOYS, AND CHILDREN'S VEHICLES—Con.</b>						
39443 —	Baby carriages and children's vehicles, except bicycles with pneumatic tires—Con.						
39443 47	Two wheel sidewalk cycles with solid or semipneumatic tires (wheel usually less than 20 in. diameter) ----- thousands	(NA)	(S)	( <sup>3</sup> )	(NA)	( <sup>4</sup> )	( <sup>4</sup> )
39443 81	Parts for children's vehicles, sold separately -----	(NA)	(X)	7.5	8	(X)	20.3
39443 98	Other children's vehicles, including scooters, wagons, baby walkers, sleds, etc.) ----- thousands	(NA)	(S)	3147.8	26	(S)	4187.6
39443 00	Baby carriages and children's vehicles, except bicycles with pneumatic tires, n.s.k. -----	(NA)	(X)	5.6	(NA)	(X)	.5
39444 —	Toys, excluding games, hobbies, and electronic toys -----	(NA)	(X)	1 501.6	(NA)	(X)	1 329.5
39444 11	Doll carriages, strollers, and doll carts ----- thousands	(NA)	(D)	(D)	5	(S)	7.2
39444 13	Doll houses and furniture (excluding collectors' doll houses, miniatures, and accessories) -----	(NA)	(X)	4.5	8	(X)	20.2
39444 15	Toy trains and equipment (mechanical and electric) -----	(NA)	(X)	44.1	4	(X)	30.4
39444 17	Mechanically powered toys, except road-racing sets (excluding scale model operating railroads, cars, boats, planes, etc.) -----	(NA)	(X)	6.3	6	(X)	119.3
39444 19	Road-racing sets, including accessories and parts -----	(NA)	(X)	(D)	6	(X)	72.9
	Nonpowered transportation toys (nonriding), excluding model kits:						
39444 21	Units (sold without accessories):						
39444 23	Plastics, more than 6 in. in length ----- thousands	(NA)	(S)	127.7	5	**3 916.6	26.6
39444 24	Other, more than 6 in. in length do-----	(NA)	(S)	3	3	(S)	66.3
39444 28	6 in. in length or less (all materials) do-----	(NA)	(D)	( <sup>5</sup> )	7	(D)	72.2
39444 29	Sets (sold with accessories) do-----	(NA)	(D)	( <sup>5</sup> )	4		
39444 31	Musical toys and toy musical instruments do-----	(NA)	(S)	13.8	8	(S)	41.8
39444 32	Infant toys, not elsewhere classified do-----	(NA)	(S)	124.5	11	(S)	64.8
39444 34	Construction sets and building toys do-----	(NA)	(S)	134.4	3	(S)	55.5
39444 35	Preschool toys, not elsewhere classified (excluding infants' toys and building toys) do-----	(NA)	39 764.3	353.3	22	*66 056.1	263.2
39444 37	Preschool playsets do-----	(NA)		6	6		
39444 39	Toy guns, gun sets, and rifles -----	(NA)	(X)	23.0	15	(X)	37.8
39444 41	Children's books: coloring books and picture-word books -----	(NA)	(X)	30.6	15	(X)	30.7
39444 43	Juvenile-scale sporting goods and inflatables, including sand, water, gardening toys, etc. -----	(NA)	(X)	67.5	7	(X)	29.1
39444 45	Housekeeping and cooking toys, including tea sets and play tools -----	(NA)	(X)	69.9	11	(X)	46.7
39444 95	Parts for toys -----	(NA)	(X)	39.7	9	(X)	83.7
39444 99	Other toys not listed above -----	(NA)	(X)	5377.9	68	(X)	252.2
39444 00	Toys, excluding games, hobbies, and electronic toys, n.s.k. -----	(NA)	(X)	14.0	(NA)	(X)	8.8
39445 —	Hobbies: models (operating or static); craft and structural kits, sets, and individual units; scientific equipment in kit or set form -----	(NA)	(X)	399.2	(NA)	(X)	377.0
	Operating models:						
39445 11	Electrically operated railroads (individual units, kits, sets, and accessories) -----	(NA)	(X)	39.8	5	(X)	13.9
39445 13	Operating cars, boats, planes, and other models (individual units, kits, and sets) -----	(NA)	(X)	89.4	21	(X)	33.5
	Static models, other than plastics:						
39445 15	Railroad, car, boat, plane, and other models in individual units, kits, and sets, other than plastics -----	(NA)	(X)	18.6	3	(X)	1.4
39445 17	Structural kits, sets, and components, other than plastics -----	(NA)	(X)	4	(X)	11.4	
39445 19	Plastics static models -----	(NA)	(X)	90.2	9	(X)	54.7
39445 21	Components and accessories for models -----	(NA)	(S)	123.6	39	(S)	13.7
39445 23	Crafts: kits and supplies individually packaged or in bulk, including decoupage, macrame, tiffany glass, beading, paint by number sets, etc. (excluding glass beads) ----- thousands	(NA)	(S)	15.2	10	(S)	215.7
39445 25	Science: microscopes, chemistry sets, or any natural science kit or set (including botany, mineralogy, and electrical kits or sets, etc.) ----- do-----	(NA)	(S)	15.2	10	(S)	17.2
39445 27	Collectors' miniatures:						
39445 29	Doll houses and accessories ----- thousands	(NA)	(S)	3.2	4	(S)	4.5
	Other, including soldiers or historic figures, scale cars, aircraft, etc. (excluding dolls) ----- do-----	(NA)	(S)	3.3	5	(S)	6.8
39445 00	Hobbies: models (operating or static); craft and structural kits, sets, and individual units; scientific equipment in kit or set form, n.s.k. -----	(NA)	(X)	15.9	(NA)	(X)	4.2
39446 —	Nonelectronic games -----	(NA)	(X)	539.1	(NA)	(X)	399.1
39446 15	Children's board games (under 12 yr) ----- thousands	(NA)	(S)	57.6	12	(S)	64.9
39446 18	Family and other board games (chess, checkers, etc.) (12 yr and over) ----- do-----	(NA)	(S)	235.6	22	(S)	124.2
39446 21	Sports-oriented action and skill games (football, baseball, etc.) ----- do-----	(NA)	(S)	60.1	9	(S)	40.0
39446 24	Nonsports-oriented action and skill games ----- do-----	(NA)	(S)	( <sup>6</sup> )	6	(S)	11.4
39446 27	Puzzles ----- do-----	(NA)	(S)	51.4	17	(S)	101.5
39446 95	Other games ----- do-----	(NA)	(S)	6118.5	15	(S)	47.8
39446 96	Parts for games (excluding electronic parts) -----	(NA)	(X)	5.1	7	(X)	9.4
39446 00	Nonelectronic games, n.s.k. -----	(NA)	(X)	10.8	(NA)	(X)	-

See footnotes at end of table.

**Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>	
			Quantity <sup>2</sup>	Value (million dollars)		Quantity <sup>2</sup>	Value (million dollars)
3944- --	<b>GAMES, TOYS, AND CHILDREN'S VEHICLES—Con.</b>						
39447 —	Electronic games and toys, excluding disks, tapes, and cartridges	(NA)	(X)	139.5	(NA)	(X)	1 347.8
39447 12	Home video games (for additional detail, see Current Industrial Report MA-36P, Communication Equipment, Including Telephone and Telegraph Equipment)	(NA)	(X)	38.0	11	(X)	1 305.7
39447 14	Electronic games (not video) (for additional detail, see Current Industrial Report MA-36P, Communication Equipment, Including Telephone and Telegraph Equipment)	(NA)	(X)	6			
39447 16	Electronic toys (for additional detail, see Current Industrial Report MA-36P, Communication Equipment, Including Telephone and Telegraph Equipment)	(NA)	(X)	94.0	5	(X)	42.0
39447 00	Electronic games and toys, n.s.k.	(NA)	(X)	7.5	(NA)	(X)	-
39440 —	Games, toys, and children's vehicles, n.s.k.	(NA)	(X)	224.0	(NA)	(X)	208.5
39440 00	Games, toys, and children's vehicles, n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	138.9	(NA)	(X)	107.8
39440 02	Games, toys, and children's vehicles, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	85.1	(NA)	(X)	100.7
3949- --	<b>SPORTING AND ATHLETIC GOODS, N.E.C.</b>						
	Total	(NA)	(X)	4 289.9	(NA)	(X)	3 160.8
39491 —	Fishing tackle and equipment	(NA)	(X)	406.4	(NA)	(X)	341.9
	Fishing rods:						
39491 01	Glass	(NA)	3 285.3	13.8	16	**6 148.7	33.2
39491 03	Graphite	(NA)	(S)	19.3	13	**798.0	8.9
39491 05	Other	(NA)	(S)	6	(S)	2.2	
	Fishing reels:						
39491 07	Spinning	(NA)	(S)	2.0	2	(*)	(*)
39491 09	Spin casting	(NA)	(S)	7	3 805.7	40.7	
39491 10	Other	(NA)	(S)	2.8	6	**540.7	*17.5
39491 14	Fishing rod and reel combinations	(NA)	(S)	52.5	5	**5 429.3	59.6
39491 17	Fish hooks, including snelled hooks	(NA)	(X)	22.0	8	(X)	24.4
39491 18	Casting plugs, spinners, and spoons; flies, lures, and similar artificial baits		1,000 dozen				
39491 20	Tackle boxes	(NA)	(S)	105.4	58	(S)	67.7
39491 21	Other fishing equipment, including creels, fish and bait buckets, floats, furnished lines, sinkers, snap swivels, etc.	(NA)	(S)	(*)	10	(S)	33.5
39491 00	Fishing tackle and equipment, n.s.k.	(NA)	(X)	7181.3	59	(X)	46.1
39492 —	Golf equipment	(NA)	(X)	963.5	(NA)	(X)	644.0
39492 31	Golf balls		1,000 dozen				
39492 41	Golf clubs:	(NA)	17 104.0	161.2	12	24 062.9	199.8
39492 45	Irons	(NA)	*22 819.4	437.3	31	*8 043.9	156.5
39492 47	Woods	(NA)	*5 059.9	169.5	34	3 716.7	125.8
39492 98	Golf bags	(NA)	2 064.7	68.8	15	*1 076.9	41.1
	Other golf equipment, such as carts for carrying golf bags, shafts sold as such, tees, and training devices for putting and driving (excluding shoes and apparel)	(NA)	(X)	116.1	31	(X)	114.9
39492 00	Golf equipment, n.s.k.	(NA)	(X)	10.6	(NA)	(X)	5.9
39493 —	Playground equipment	(NA)	(X)	192.4	(NA)	(X)	(NA)
39493 01	Home playground equipment, including swing sets, slides, seesaws, sandboxes, etc.	(NA)	(X)	123.2	17	(X)	85.3
39493 02	Institutional and commercial playground equipment, heavy duty, including swings, slides, etc.	(NA)	(X)	68.3	20	(X)	58.7
39493 00	Playground equipment, n.s.k.	(NA)	(X)	.9	(NA)	(NA)	(NA)
39496 —	Gymnasium and exercise equipment	(NA)	(X)	594.2	(NA)	(NA)	(NA)
39496 01	Gymnasium and gymnastic apparatus and equipment, including parallel and horizontal bars, balance beams, trampolines, wrestling and other gymnasium mats, etc.	(NA)	(X)	39.7	38	(X)	53.3
39496 02	Weight lifting equipment, including belts, benches, and weights	(NA)	(X)	116.8	24	(X)	126.2
39496 03	Multipurpose home gyms	(NA)	(X)	86.4	(NA)	(NA)	(NA)
39496 04	Rowing machines	(NA)	(X)	29.3	(NA)	(NA)	(NA)
39496 05	Exercise cycles		1,000 thousands	(S)	87.7	13	*1 353.4
39496 06	Other health, physical fitness, and exercising equipment, including treadmills, slant-boards, multistation training units, etc. (excluding multipurpose home gyms and rowing machines)	(NA)	(X)	189.8	47	(X)	83.1
39496 00	Gymnasium and exercise equipment, n.s.k.	(NA)	(X)	44.5	(NA)	(NA)	(NA)
39495 —	Other sporting and athletic goods	(NA)	(X)	1 529.6	(NA)	(X)	1 314.1
39495 11	Billiard and pool tables	(NA)	(S)	50.4	26	(S)	55.6
39495 15	Billiard and pool supplies (such as balls, cues, etc.), sold separately	(NA)	(X)	12.9	13	(X)	9.8
39495 27	Bowling alleys and bowling pin setters		1,000 thousand	(S)	(*)	6	16.3
39495 28	Bowling alley playing supplies:	(NA)	2 238.7	55.8	5	**1 853.5	36.7
39495 30	Bowling balls	(NA)	(X)	*153.4	14	(X)	81.0
39495 34	Other bowling alley playing supplies, including pins, etc.	(NA)	(S)	36.6			
39495 35	Baseballs		1,000 dozen	(D)	4	(S)	21.1
39495 37	Softballs	(NA)	(S)	(D)	2	(S)	
	Baseball mitts and gloves, including softball	(NA)	(S)	7		**783.3	17.6

See footnotes at end of table.

**Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>	
			Quantity <sup>2</sup>	Value (million dollars)		Quantity <sup>2</sup>	Value (million dollars)
<b>3949- --</b>	<b>SPORTING AND ATHLETIC GOODS, N.E.C.—Con.</b>						
39495 —	Other sporting and athletic goods—Con.						
39495 38	Baseball bats, including softball bats:						
39495 39	Wood -----	1,000	(NA)	(S)	8.7	3	378.4
39495 41	Metal -----	do	(NA)	(S)	32.9	4	30.3
39495 43	Footballs-----	do	(NA)	243.7	22.8	8	*362.8
39495 48	Basketballs-----	do	(NA)	(S)	(D)	7	24.2
39495 50	Soccer balls-----	do	(NA)	(S)	(D)	6	14.3
	Inflatable athletic balls (other than footballs, basketballs, soccer balls, including volleyballs, etc.)-----	do					49.8
	Tennis equipment:						2.5
39495 82	Tennis rackets, all types (strung and unstrung)-----	thousands	(NA)	(S)	(D)	12	*561.6
39495 83	Tennis balls -----	1,000	(NA)	(S)	(D)	4	7.8
		dozen					2 951.6
39495 86	Other tennis equipment and accessories (excluding tennis clothing, shoes, and nets)-----		(NA)	(S)	46.9	13	112.7
39495 87	Racquetball rackets-----	thousands	(NA)	(S)	11.2	7	91.9
39495 88	Racquetballs -----	1,000	(NA)	(S)	(NA)	(NA)	30.9
		dozen					(NA)
39495 89	Uninflatable athletic balls, including handballs, and table tennis balls, (excluding golf balls, tennis balls, softballs, baseballs, bowling balls, billiard balls, and racquetballs)-----	do	(NA)	(S)	6.8	(NA)	(NA)
39495 85	Archery equipment -----		(NA)	(X)	93.0	34	73.2
39495 52	Shoe skates and roller rink skates (excluding clamp-on type roller skates) (made from own or purchased shoes)-----	1,000 pair	(NA)	(S)	3.1	18	57.0
39495 55	Ice skates (made from own or purchased shoes)-----	do	(NA)	(S)	5	457.8	13.6
39495 56	Wooden and plastics skateboards (including complete sets)-----	thousands	(NA)	(S)	48.3	6	3.7
39495 72	Snow skis-----	1,000 pair	(NA)	(S)	93.2	(NA)	(NA)
39495 73	Winter sports equipment, such as snow ski poles, bobsleds, toboggans, hockey goods, excluding athletic clothing, body protective equipment, skates, shoes, children's sleds, and children's skis-----		(NA)	(S)		13	23.1
39495 74	Surfboards-----	thousands	(NA)	(S)	2.9	9	(S)
39495 75	Water skis-----	1,000 pair	(NA)	(S)	47.8	13	417.4
39495 76	Sailboards-----	thousands	(NA)	(S)	5	(X)	32.3
39495 77	Underwater sports equipment (scuba); skin diving equipment, such as aqua lungs and attachments, face masks, fins, etc. (excluding clothing, watches, and cameras)-----		(NA)	(S)	82.6		83.7
39495 92	Football helmets-----	thousands	(NA)	(S)	25.9	(NA)	(NA)
39495 93	Other sports helmets, including bicycle (excluding football, motorcycle, and auto racing)-----		(NA)	(X)	8.0	(NA)	(NA)
39495 96	Body protective equipment for all sports, excluding helmets (including masks, shoulder pads, chest pads, knee pads, kidney pads, mouth guards, shin guards, etc.)-----		(NA)	(X)	43.0	(NA)	(NA)
39495 94	Football, baseball, and soccer equipment, n.e.c., including track field, and miscellaneous athletic field equipment, goal posts and nets, training devices for batting and pitching, javelins, shot put, etc.-----		(NA)	(X)	27.1	35	(X)
39495 95	Wading pools and other above-ground swimming pools less than 15 ft in diameter, not filtered, including plastics and metal-walled types-----	thousands	(NA)	(X)	60.2	13	(S)
39495 97	Above-ground swimming pools, 15 ft in diameter or more, filtered (completely manufactured)-----	do	(NA)	(S)	168.1	11	*33.2
39495 81	Tanning beds-----	do	(NA)	(S)	(NA)	(NA)	37.2
39495 05	Ammunition reloading equipment for noncommercial use-----		(NA)	(X)		(X)	(NA)
39495 98	Other sporting and athletic goods, including table tennis goods (excluding balls), skeet and shooting range equipment (including decoys, clay pigeons, trap target launches, etc. (excluding small arms, ammunition)), including badminton rackets, shuttlecocks and related equipment, squash equipment, darts and dart boards, clamp on roller skates and other supplies (excluding athletic clothing and shoes)-----		(NA)	(S)	290.6	105	(NA)
39495 00	Other sporting and athletic goods, n.s.k.-----		(NA)	(X)	44.1	(NA)	(X)
39490 —	Sporting and athletic goods, n.e.c., n.s.k.-----		(NA)	(X)	603.8	(NA)	(X)
39490 00	Sporting and athletic goods, n.e.c., n.s.k., typically for establishments with 5 employees or more (see note)-----		(NA)	(X)	420.9	(NA)	329.4
39490 02	Sporting and athletic goods, n.e.c., n.s.k., typically for establishments with less than 5 employees (see note)-----		(NA)	(X)	182.9	(NA)	245.2
						(X)	84.2

Note: In 1987 Census of Manufactures, data for establishments of small single unit companies with up to 20 employees were estimated from administrative-record data rather than data actually collected from respondents. Employment cutoffs used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1987 and 1982 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

<sup>1</sup>Data reported by all producers, not just those with shipments of \$100,000 or more.

<sup>2</sup>For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: \* 10 to 19 percent estimated; \*\* 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

<sup>3</sup>For 1987, product codes 39443 11 and 39443 47 are included in product code 39443 98 to avoid disclosing data for individual companies.

<sup>4</sup>For 1982, product codes 39443 33 and 39443 47 were included in product code 39443 98 to avoid disclosing data for individual companies.

<sup>5</sup>For 1987, product codes 39444 24 and 39444 28 are included in product code 39444 99 to avoid disclosing data for individual companies.

<sup>6</sup>For 1987, product code 39446 24 is included in product code 39446 95 to avoid disclosing data for individual companies.

<sup>7</sup>For 1987, product codes 39491 09 and 39491 20 are included in product code 39491 21 to avoid disclosing data for individual companies.

<sup>8</sup>For 1982, product code 39491 07 was included in product code 39491 10.

<sup>9</sup>For 1987, product code 39495 27 is included in product code 39495 30 to avoid disclosing data for individual companies.

**Table 3. Materials Consumed by Kind: 1987 and 1982**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987		1982		
		Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)	
<b>INDUSTRY 3931, MUSICAL INSTRUMENTS</b>						
Materials, components, parts, containers, and supplies						
242101	Rough and dressed lumber	1,000 bd ft..	(X)	297.8	(X) 368.1	
251011	Cabinets		(S)	32.6	(S) 32.9	
265001	Paperboard containers, boxes, and corrugated paperboard		(X)	(3)	(X) 22.9	
365150	Loudspeakers, microphones, and tuners (all types)		(X)	2.6	(X) 4.0	
367000	Electronic components and accessories		(X)	2.3	(X) 8.8	
393101	Parts specially designed for musical instruments, including actions, strings, mouthpieces, etc.		(X)	29.7	(X) 60.6	
970099	All other materials and components, parts, containers, and supplies consumed		(X)	82.6	(X) 98.5	
971000	Materials, components, parts, containers, and supplies, n.s.k. <sup>2</sup>		(X)	3101.6	(X) 98.8	
			(X)	46.4	(X) 41.6	
<b>INDUSTRY 3942, DOLLS AND STUFFED TOYS</b>						
Materials, components, parts, containers, and supplies						
331001	Mill shapes and forms, except castings and forgings:		(X)	104.7	(X) 167.4	
331020	Carbon steel	1,000 s tons..	(S)	(3)	(NA) (NA)	
331031	Alloy steel	do..	(X)	-	(NA) (NA)	
335001	Stainless steel	do..	(X)	-	(NA) (NA)	
282104	Aluminum and aluminum-base alloy	mil lb..	(S)	(3)	(NA) (NA)	
	Plastics resins consumed in the form of granules, pellets, powder, liquid, etc., but excluding sheets, rods, tubes, and shapes	do..	(S)	.7	3.0 8.5	
220129	Broadwoven fabrics (cotton, wool, manmade fiber fabrics, etc.)	mil lin yd..	(X)	16.9	*28.2 33.3	
265001	Paperboard containers, boxes, and corrugated paperboard		(X)	1.3	(X) 8.6	
362115	Fractional horsepower electric motors (less than 1 hp, excluding timing motors)	thousands..	-	-	.5	
308007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes		(X)	.3	(X) .2	
263105	Paperboard, except that used for shipping, such as news, chip, pasted, tablet, check, binders' board, etc.	1,000 s tons..	(S)	(3)	(Z) 6.0	
242111	Hardwood lumber, rough and dressed	mil bd ft..	(S)	-	-	
242123	Softwood lumber, rough and dressed	do..	(S)	(3)	(Z) -	
367000	Electronic components and accessories		(X)	(3)	(NA) (NA)	
394200	Doll parts		(X)	16.6	(X) 24.7	
970099	All other materials and components, parts, containers, and supplies		(X)	33.6	(X) 70.3	
971000	Materials, components, parts, containers, and supplies, n.s.k. <sup>2</sup>		(X)	35.3	(X) 15.3	
<b>INDUSTRY 3944, GAMES, TOYS, AND CHILDREN'S VEHICLES</b>						
Materials, components, parts, containers, and supplies						
331001	Mill shapes and forms, except castings and forgings:		(X)	1 271.1	(X) 1 559.3	
331020	Carbon steel	1,000 s tons..	(S)	28.0	(S) 47.4	
331031	Alloy steel	do..	(S)	.7	(S) .8	
335001	Stainless steel	do..	(S)	.1	(S) 3.9	
282104	Aluminum and aluminum-base alloy	mil lb..	(S)	5.5	32.1 17.2	
	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc., but excluding sheets, rods, tubes, and shapes	do..	(S)	190.0	(S) 229.8	
220129	Broadwoven fabrics (cotton, wool, manmade fiber fabrics, etc.)	mil lin yd..	(S)	31.7	(S) 19.1	
265001	Paperboard containers, boxes, and corrugated paperboard		(S)	120.7	(X) 136.1	
362115	Fractional horsepower electric motors (less than 1 hp, excluding timing motors)	thousands..	(S)	2.3	(S) 4.6	
308007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes		(X)	202.5	(X) 154.8	
263105	Paperboard, except that used for shipping, such as news, chip, pasted, tablet, check, binders' board, etc.	1,000 s tons..	(S)	83.4	(S) 50.1	
242111	Hardwood lumber, rough and dressed	mil bd ft..	(S)	11.9	**28.3 15.2	
242123	Softwood lumber, rough and dressed	do..	(S)	12.5	(S) 10.3	
367000	Electronic components and accessories		(X)	48.4	(X) 340.5	
394200	Doll parts		(X)	(3)	(X) 19.1	
970099	All other materials and components, parts, containers, and supplies		(X)	3411.3	(X) 388.3	
971000	Materials, components, parts, containers, and supplies, n.s.k. <sup>2</sup>		(X)	122.1	(X) 122.1	
<b>INDUSTRY 3949, SPORTING AND ATHLETIC GOODS, N.E.C.</b>						
Materials, components, parts, containers, and supplies						
331001	Mill shapes and forms, except castings and forgings:		(X)	1 827.9	(X) 1 344.3	
331020	Carbon steel	1,000 s tons..	(S)	95.3	(S) 55.9	
	Alloy steel, except stainless	do..	(S)	31.6	**49.8 34.7	
331033	Stainless steel:					
331050	Sheat and strip	1,000 s tons..	(S)	6.3	(S) 2.8	
	All other	do..	(S)	20.8	(S) 16.0	
335301	Aluminum and aluminum-base alloy:					
335405	Shaft, plate, and foil	mil lb..	(S)	10.7	(S) 8.0	
	Extruded shapes, including extruded rod, bar, pipe, tube, etc.	do..	(S)	50.0	(S) 39.6	
335008	All other (wire, rolled rod and bar, powder, weldable tubing, etc.)	do..	(S)	10.2	(S) 5.1	
335105	Copper and copper-base alloy	do..	(S)	3.1	1.2 4.5	

See footnotes at end of table.

**Table 3. Materials Consumed by Kind: 1987 and 1982—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text.]

1987 material code	Material	1987		1982	
		Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)
<b>INDUSTRY 3949, SPORTING AND ATHLETIC GOODS, N.E.C.—Con.</b>					
336005	Aluminum and aluminum-base alloy castings ----- mil lb--	(S)	18.8	*12.6	25.5
285101	Paints, varnishes, laquers, shellacs, japsans, enamels, and allied products ----- 1,000 gal--	(S)	20.7	(S)	17.7
282104	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc., but excluding sheets, rods, tubes, and shapes ----- mil lb--	(S)	79.6	(S)	61.8
308007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes -----	(X)	85.2	(X)	67.4
220123	Broadwoven fabrics (cotton, wool, manmade fiber fabrics, etc.) ----- mil lin yd--	(S)	43.3	(S)	32.9
311100	Leather, finished ----- mil sq ft--	(S)	15.8	(S)	30.2
345001	Bolts, nuts, screws, rivets, washers, and screw machine products -----	(X)	44.2	(X)	15.7
362115	Fractional horsepower electric motors (less than 1 hp, excluding timing motors) ----- thousands--	(S)	7.1	*41.0	3.3
356200	Ball and roller bearings -----	(X)	4.3	(NA)	
242101	Rough and dressed lumber ----- mil bd ft--	(S)	54.6	(S)	29.6
190004	Parts specially designed for sporting goods -----	(X)	283.2	(X)	212.9
265001	Paperboard containers and boxes and corrugated paperboard -----	(X)	47.0	(X)	41.4
970099	All other materials and components, parts, containers, and supplies -----	(X)	522.5	(X)	365.9
971000	Materials, components, parts, containers, and supplies, n.s.k. <sup>2</sup> -----	(X)	373.6	(X)	273.4

<sup>1</sup>For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: \* 10 to 19 percent estimated; \*\* 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

<sup>2</sup>Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

<sup>3</sup>Data are combined with material code 970099 to avoid disclosing data for individual companies.



# APPENDIX

## Scope and Coverage and Explanation of Terms

### GENERAL

The 1987 Census of Manufactures is the 32nd census of manufacturing establishments conducted in the United States. For 1987, it was conducted as part of the economic censuses, which included the censuses of mineral industries, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses, under authority of title 13 of the United States Code. Title 13 specifies that an economic census be conducted every 5 years to cover years ending in 2 and 7.

### SCOPE AND COVERAGE

#### Establishment Basis of Reporting

The census of manufactures is conducted on an establishment basis. All manufacturing establishments with one paid employee or more at any time during the year are covered by the census of manufactures. Therefore, a company operating at more than one location is required to file a separate report for each location. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units which serve manufacturing establishments of the same company. Where these auxiliary operations are conducted at the same location as the manufacturing operation, they are usually included in the report for the operating manufacturing establishment.

#### Use of Administrative Records

From a universe of approximately 350,000 manufacturing establishments in the 1987 Census of Manufactures, approximately 150,000 small single-establishment companies were excused from filing reports. Selection of the small establishment nonmail cases was done on an industry-by-industry basis. A variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. The cutoffs were selected so the administrative-record cases would account for approximately 3 percent or less of the value of shipments for the industry. These cutoffs were then adjusted so that all single-establishment companies with less than 5 employees were excluded from the mail canvass, while all establishments with more than 20 employees were included. Where establishments in the 5 to 20 employee size range were included in the mail canvass, an abbreviated census form was frequently used.

For these nonmail establishments, (and a small number of larger establishment whose reports were not received at the time the data were tabulated) data on employment, payroll, and receipts were obtained from administrative records of other government agencies rather than from census forms. The administrative-record information was then used in conjunction with industry averages to estimate the data for these establishments. The value of shipments and cost of materials were not distributed among specific products and materials but were included in the product and material "not specified by kind" (n.s.k.) categories.

### EXPLANATION OF TERMS

**Number of establishments and companies**-A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

**All employees**-Includes all full-time and part-time employees on the payrolls at any time during the year. Included are all persons on paid sick leave, paid holidays, and paid vacations. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average of those for midmonth payroll periods of March, May, August, and November.

**Production workers**-Includes workers up through the working-supervisor level engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., power-plant), recordkeeping, and other closely associated services. Truckdrivers delivering ready-mixed concrete are also included in production workers.

**Other employees**-Includes nonproduction personnel, including those engaged in the following activities: supervision above working-supervisor level, sales (including driver/salespersons), sales delivery (truckdrivers and helpers), advertising, credit collection, installation and

servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional, and technical employees.

**Payroll**-Includes the gross earnings for the "employees" defined above, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Production-worker hours**-Covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the plant.

**Cost of materials**-Refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuels consumed, regardless of whether they were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (a) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or generating electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Specific materials consumed (table 3)**-In addition to the total cost of materials which every establishment was required to report, information was also collected for most manufacturing industries on the consumption of major materials used in manufacturing. These inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Establishments consuming less than a specified amount (usually \$10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which administrative records were used was estimated as "not specified by kind" (n.s.k.).

**Value of shipments and other receipts**-Generally refers to received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all

miscellaneous receipts such as receipts for contract work performed for others, installation and repair receipts, sale of scrap, and sale of products bought and resold without further processing. Included are all items made by or for the establishment from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In a few industries, the value of production or value of work completed is used instead of value of shipments. These industries are identified in the introduction and are footnoted in table 1.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, that is, including not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead and profit).

**Shipments or production of individual products (table 2)**-In the 1987 census, detailed shipment information was collected for approximately 11,000 individual products. These products are identified by a seven-digit code and are grouped into approximately 1,500 classes of products, which in turn are primary to 459 four-digit industries. Data at the five-digit product-class level have been collected each year as part of the annual survey of manufactures. Information at the seven-digit level, collected for many industries in the current industrial reports program, is not included in this table.

**Value added by manufacture**-This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for products manufactured plus receipts for services rendered. The result of this calculation is then adjusted by the addition of value added by merchandising operations (that is, the difference between the sales value and cost of merchandise sold without further manufacturing, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1), value added is adjusted only for the change in work-in-process inventories between the beginning and end of the year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

Value added avoids the duplication in the figure for value of shipments which results from the use of products of some establishments as materials by others. Value

added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for new plant and equipment**—Establishments in operation and any known plants under construction were asked to report their expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for used plant and equipment, expenditures for land, and cost of maintenance and repairs charged as current operating expenses. Data for used plant and equipment will be published in the final industry bulletin.

**End-of-year inventories**—Comprised of (a) finished products; (b) work-in-process; and (c) materials, supplies, fuels, etc. Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method.

Therefore, 1982 through 1987 data for inventories are not strictly comparable to prior-year data.

**Specialization and coverage ratios**—An establishment is classified in a particular industry if its shipments of primary products of the industry exceed in value its shipments of the products of any other single industry. An establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). The following ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in table 1 and data on product shipments shown in table 2.

**Specialization ratio**—Represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

**Coverage ratio**—Represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments, wherever classified.

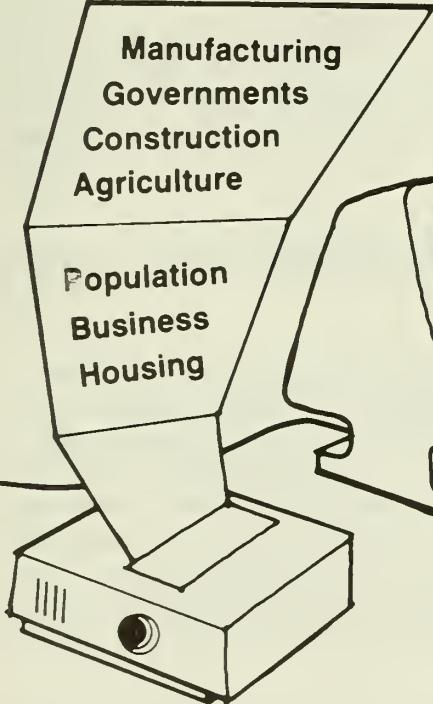


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